

### ABSTRACT

An improved process for producing bonded activated carbon structures utilizing microwave radiation is provided. The structures are produced by exposing a particulate mixture comprised of activated carbon particles and polyolefin resin binder particles in a microwave transparent mold to increase the temperature of the activated carbon particles 3 to 30°C above the crystalline melting point of the polyolefin resin binder and thereafter compressing the mixture to increase contact between the particles and lowering the temperature of the particulate mixture below the melting point of the polyolefin while maintaining point bond formation conditions. The bonded structures may be separated from the container and used as such or the bonded structure and container in which it is formed may be retained and used as a unit.